

ABSTRACT

The invention concerns a method for forming nanostructures of semi-conductor material on a substrate of dielectric material by chemical vapour deposition (CVD). Said method comprises the following steps:

- a step of forming on the substrate (12) stable nuclei (14) of a first semi-conductor material in the form of islands, by CVD from a precursor (11) of the first semi-conductor material chosen so that the dielectric material (12) accepts the formation of said nuclei (14),
- a step of forming nanostructures (16A, 16B) of a second semi-conductor material from the stable nuclei (14) of the first semi-conductor material, by CVD from a precursor (21) chosen to generate a selective deposition of the second semi-conductor material only on said nuclei (14).

The invention further concerns nanostructures formed according to one of said methods as well as devices comprising said nanostructures.

Figure 2.